

What is claimed is:

1. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of:
  - a) an amino acid sequence of SEQ ID NO:1,
  - b) a naturally-occurring amino acid sequence having at least 90% sequence identity to the sequence of SEQ ID NO:1,
  - c) a biologically-active fragment of the amino acid sequence of SEQ ID NO:1, and
  - d) an immunogenic fragment of the amino acid sequence of SEQ ID NO:1.
- 10 2. An isolated polypeptide of claim 1, having a sequence of SEQ ID NO:1.
3. An isolated antibody which specifically binds to a polypeptide of claim 1.
4. A diagnostic test for a condition or disease associated with the expression of GAPIP in a biological sample comprising the steps of:
  - a) combining the biological sample with an antibody of claim 3, under conditions suitable for the antibody to bind the polypeptide and form an antibody: polypeptide complex; and
  - b) detecting the complex, wherein the presence of the complex correlates with the presence of the polypeptide in the biological sample.
- 25 5. The antibody of claim 3, wherein the antibody is:
  - (a) a chimeric antibody;
  - (b) a single chain antibody;
  - (c) a Fab fragment;
  - (d) a F(ab')<sub>2</sub> fragment; or
  - (e) a humanized antibody.
6. A composition comprising an antibody of claim 3 and an acceptable excipient.
- 30 7. A method of diagnosing a condition or disease associated with the expression of GAPIP in a subject, comprising administering to said subject an effective amount of the composition of claim 6.

8. A composition of claim 6, wherein the antibody is labeled.

9. A method of diagnosing a condition or disease associated with the expression of GAPIP in a subject, comprising administering to said subject an effective amount of the composition  
5 of claim 8.

10. A method of preparing a polyclonal antibody with the specificity of the antibody of  
claim 3 comprising:

- 10 a) immunizing an animal with a polypeptide of SEQ ID NO:1 or an immunogenic fragment thereof under conditions to elicit an antibody response;
- b) isolating antibodies from said animal; and
- c) screening the isolated antibodies with the polypeptide thereby identifying a polyclonal antibody which binds specifically to a polypeptide of SEQ ID NO:1.

11. An antibody produced by a method of claim 10.

12. A composition comprising the antibody of claim 11 and a suitable carrier.

13. A method of making a monoclonal antibody with the specificity of the antibody of  
claim 3 comprising:

- 13 a) immunizing an animal with a polypeptide of SEQ ID NO:1 or an immunogenic fragment thereof under conditions to elicit an antibody response;
- b) isolating antibody producing cells from the animal;
- c) fusing the antibody producing cells with immortalized cells to form monoclonal antibody-producing hybridoma cells;
- d) culturing the hybridoma cells; and
- e) isolating from the culture monoclonal antibody which binds specifically to a polypeptide of SEQ ID NO:1.

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14. A monoclonal antibody produced by a method of claim 13.

15. A composition comprising the antibody of claim 14 and a suitable carrier.

16. The antibody of claim 3, wherein the antibody is produced by screening a Fab expression library.

17. The antibody of claim 3, wherein the antibody is produced by screening a recombinant immunoglobulin library.

18. A method for detecting a polypeptide of SEQ ID NO:1 in a sample comprising the steps of:

- a) incubating the antibody of claim 3 with a sample under conditions to allow specific binding of the antibody and the polypeptide; and
- b) detecting specific binding, wherein specific binding indicates the presence of a polypeptide of SEQ ID NO:1 in the sample.

19. A method of purifying a polypeptide of SEQ ID NO:1 from a sample, the method comprising:

- a) incubating the antibody of claim 3 with a sample under conditions to allow specific binding of the antibody and the polypeptide; and
- b) separating the antibody from the sample and obtaining purified polypeptide of SEQ ID NO:1.